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UPDATE TO HAZARDOUS WASTE TANK SYSTEMS MANAGEMENT PLAN - GRK-263-96

Rocky Mountain Remediation Services, L.L.C. (RMRS) is submitting the attached Update to Hazardous Waste Tank Systems Management Plan for the Rocky Flats Environmental Technology Site. Although the Hazardous Waste Tank Systems Management Plan is submitted annually, it has been modified from the April 12, 1996 plan, to describe progress made to date and to revise schedules related to the hazardous waste tank systems.

In addition, the following sections have been updated per your request.

- Section 7 - Schedule To Correct Deficiencies
- Updated Description of the 231 Tank System
- Updated Inspection Frequency of the Process Waste Transfer System

If you have any questions, please contact Veronica Orozco at extension 4493.

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Attachments:
As Stated

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HAZARDOUS WASTE TANK SYSTEMS MANAGEMENT PLAN

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1.0 INTRODUCTION

This Hazardous Waste Tank Systems Management Plan (Plan) has been developed to address hazardous waste storage and treatment tanks at the Rocky Flats Environmental Technology Site (RFETS). There are approximately 2800 tank systems at RFETS; however, this Plan only applies to 165 hazardous waste tank systems and 20 valve vaults. The remaining tanks are managed under existing agreements, the RCRA Part B Operating Permit, or other regulations.

This Plan outlines the path forward to manage tank systems in accordance with good management practices to meet the intent of the Colorado Hazardous Waste Regulations (CHWR's). This Plan describes how some tanks will be upgraded and/or maintained in their current configuration until no longer needed. Tank systems which are no longer needed will eventually be closed. Interim actions such as inventory removal are also described in the Plan to reduce risks associated with tank systems. Schedules to complete actions to correct deficiencies identified in this Plan are based on current estimates of resources, funding, and safety/engineering constraints. Revisions to this Plan may be necessary as those constraints change.

This Plan includes a description of the tank systems governed by this plan (Appendix 1), tank compliance status (Appendix 2), and schedules for completion of actions to correct deficiencies (Section 8). Where appropriate, this Plan establishes alternate inspection schedules for those systems which pose little risk to human health and the environment.

2.0 SCOPE

The hazardous waste tank systems included in this Plan are those subject to interim status or 90-Day accumulation requirements only. This includes active interim status tanks identified in the RFETS cleanup agreement. Those tanks are denoted in Appendix 1 for reference. This Plan does not include the following tank systems:

- Mixed residue tank systems (see the Mixed Residue Tank Systems Management Plan).
- Idle equipment tank systems (see the Idle Equipment Program Management Plan).
- Part B permitted tank systems (see the RCRA Part B Operating Permit).
- Petroleum underground storage tanks regulated by the State Inspector of Oils (see Appendix 3, Table 1, which lists these tanks for information).
- Inactive hazardous waste tank systems (see Appendix 3, Table 2, which lists these tanks for information).
- Tank systems which are not regulated by RCRA.

3.0 OBJECTIVE

The primary objective of this Plan is to define the strategy to manage hazardous waste tanks included in this Plan in compliance with applicable regulations. This strategy will: a) minimize the risk of spills; b) achieve compliance with the intent of the CHWR's; and c) reduce operating costs through improved management.

4.0 METHODOLOGY

Each hazardous waste tank system identified in this Plan was categorized based on future use and the system's compliance status. The compliance status for each tank is documented in the compliance matrix provided in Appendix 2. Noncompliant tank systems require actions to correct deficiencies; thus, schedules for completing specific tasks aimed at risk reduction have been developed, and are identified in Section 8.0.

5.0 DEFINITIONS

Regulatory terms used in this plan such as tank, tank system, and ancillary equipment are defined in the CHWR's, §260.10. Terms not defined in the CHWR's which are used in this plan are defined as follows:

CATEGORIES

Category 1 Systems - A tank or series of tanks which are non-compliant, have been verified physically empty, have influent and effluent ancillary equipment capped and physically controlled (e.g., lock out/tag out), and will be closed.

Category 2 Systems - A tank or series of tanks which are non-compliant, have a limited future use, and will be closed. This category contains three subcategories denoted as 2A, 2B, and 2C. Category 2A tank systems contain liquid inventory and are used for waste management activities which support a Vital Safety System. Category 2B tank systems contain liquid inventory, have influent and effluent sources physically controlled (e.g., lock out/tag out), and have physically empty ancillary equipment. Category 2C tank systems contain only solid inventory, have influent and effluent sources physically controlled (e.g., lock out/tag out), and have physically empty ancillary equipment.

Category 3 Systems - A tank or series of tanks which are non-compliant, currently used for hazardous waste management, and will remain in use.

Category 4 Systems - A tank or series of tanks which are compliant, currently used for hazardous waste management, and will remain in use.

Category 5 Systems - A tank or series of tanks which are compliant and have a limited future use. This category contains two subcategories denoted as 5A and 5B. Category 5A tank systems are compliant, and are used for waste management activities. Category 5B tank systems are compliant, verified physically empty, influent and effluent ancillary equipment capped and controlled physically (e.g., lock out/tag out).

PHYSICALLY EMPTY - The condition of a tank in which no liquid remains after verification from personnel familiar with the tank system or a proven technology.

VITAL SAFETY SYSTEM - Systems held to be vital by RFETS Facilities Engineering, Utilities, Safety Analysis, Building Manager, HS&E Engineering, Electronic Security and the Fire Department.

6.0 INSPECTION SCHEDULES AND METHODS

Inspection schedules and methods for each tank system have been developed based on the tank system categories. The category of a tank system may change if conditions change. As the category changes, the appropriate inspection schedule and method will be implemented. Following is a detailed description of the inspection schedules and methods.

6.1 Inspection Schedules

Two types of inspection schedules (i.e., daily and quarterly) will be used for the tanks governed by this plan. The schedules for each category of tank are described below.

Inspection schedule for Category 1 tank systems:

- Category 1 tank systems will be inspected quarterly.

Inspection schedule for Category 2 tank systems:

- Category 2A tank systems will be inspected daily.
- Category 2B tank systems will be observed daily.
- Category 2C tank systems will be inspected quarterly.

Inspection schedule for Category 3 tank systems:

- Category 3 tank systems will be inspected daily.

Inspection schedule for Category 4 tank systems:

- Category 4 tank systems will be inspected daily.

Inspection schedule for Category 5 tank systems:

- Category 5A tank systems will be inspected daily.
- Category 5B tank systems will be inspected quarterly.

6.2 Inspection methods

Three different types of inspections will be used for tanks governed by this plan. Each is discussed below.

Quarterly inspections (categories 1, 2C, 5B)

Quarterly inspections will consist of a visual inspection of the tank system to verify the following: 1) lack of evidence of releases; 2) no additional inventory (e.g., additional liquid or hazardous waste) in the tank; and 3) physical controls (e.g., lock out/tag out) remain in place. Observations will be documented in the facility's operating record including any actions necessary to correct deficiencies. In addition, Site procedures will help prevent operation of isolated systems without prior approval of unit owner.

If any additional inventory is discovered during these inspections or any related inspection, the applicable building manager must be notified and an action plan must be developed by the unit owner immediately. Action plans must include: 1) determination of the source; 2) schedule for sampling or other appropriate actions to make a hazardous waste determination; and 3) schedule to drain and isolate the tank. Daily inspections will be conducted until the inventory is removed.

Daily observations (category 2B)

Daily observations will consist of a complete visual observation of the secondary containment system for signs of potential releases. Observations will be documented in the facility's operating record including any actions necessary to correct deficiencies.

Daily inspections (categories 2A, 3, 4, 5A)

Daily inspections will be consistent with the requirements described in the Hazardous Waste Requirements Manual and the CHWR's §265.15 and §265.195. Inspections will be documented in the facility's operating record including any actions necessary to correct deficiencies.

7.0 SCHEDULE TO CORRECT DEFICIENCIES

The following schedule includes descriptions of the tasks and projected completion dates. Also included is the funding status for each task and the Sitewide Commitment Management Program (SCMP) reference number for the action plan necessary to complete the given task.

<u>Task</u>	<u>Projected Completion Date</u>	<u>SCMP Commitment No.</u>
DRAIN/ISOLATE		
1. Drain and isolate T-1 and T-2 tanks in Building 883 (SSOC)	April 26, 1996 COMPLETED 4/25/96	96-000289
2. Drain and isolate A and B series tanks in Building 883 (SSOC)	July 31, 1996 COMPLETED 5/30/96	96-000288
3. Drain and isolate 2 tanks (T-1 and T-2) in Building 776 (SSOC)	May 3, 1996 COMPLETED 5/2/96	94-006167
4. Drain and isolate T183 in Building 887 (SSOC)	April 15, 1996 COMPLETED 4/17/96	96-000175
CLOSURE		
1. Submit Closure Plans for 9 tanks in Building 883 (SSOC)	Closure Plans to be submitted to DOE,RFFO by May 31, 1995. COMPLETED	94-006398 and 94-006239
2. Submit Closure Plans for 6 tanks in Building 865/866 (SSOC)	Closure Plans to be submitted to DOE,RFFO by March 31, 1995. COMPLETED	94-007635
3. Submit Closure Plans for 4 tanks in Building 776 (SSOC)	Closure Plans to be submitted to DOE,RFFO by September 29, 1996. COMPLETED	94-006167 and 95-000010
4. Submit Closure Plans for 9 tanks in Building 444/447 (SSOC)	Closure Plans to be submitted to DOE,RFFO by September 29, 1995. COMPLETED	94-008318
5. Submit Closure Plans for 8 tanks in Building 460 (SSOC)	Closure Plans to be submitted to DOE,RFFO by June 30, 1995. COMPLETED	94-008318
6. Submit Closure Plans for two sumps and ancillary equipment in Building 889 (RMRS)	Closure Plans to be submitted to DOE,RFFO by July 28, 1995. COMPLETED	94-006916
7. Close 1 90-Day tank in Building 779 (SSOC)	December 22, 1995. COMPLETED	94-007760
8. Close 2 90-Day tanks in Building 731 (SSOC)	April 28, 1995. COMPLETED	94-007759
9. Close 2 90-Day tanks near Building 771 (SSOC)	July 27, 1996 COMPLETED	95-000321

UPGRADES

- | | | |
|--|--|-----------|
| 1. Upgrade 4 tanks in Building 776 (SSOC) | March 31, 1995 COMPLETED | 93-001395 |
| 2. Upgrade roof to prevent rain water from entering secondary containment for 7 tanks in Building 887 (SSOC) | March 31, 1995 COMPLETED | 94-006137 |
| 3. Upgrade ancillary equipment in Building 123 (SSOC) | June 23, 1995 COMPLETED | 92-006227 |
| 4. Replace the pumps for 7 tanks located in Building 887 (SSOC) | June 30, 1996 1st Pump was completed; backup pump was completed July 19, 1996. | 95-004261 |

APPENDIX 1

DESCRIPTION OF THE SYSTEMS

DESCRIPTION OF THE 231 TANK SYSTEM TANK SYSTEM

Tanks 231A and 231B store process wastewater. These tanks are tied into the reverse flow line between Buildings 374 and 774 and provide extra storage capacity for the Building 374 evaporation process. The larger of the two tanks, T231B, is 49 feet in height and 59.6 feet in diameter and has a storage capacity of 970,840 gallons. Tank 231A is 33.6 feet in height and 37 feet in diameter and has a storage capacity of 272,220 gallons. These tanks are constructed of carbon steel and were installed in 1987.

Section 265.193 of the Colorado Hazardous Waste Regulations can be interpreted to exempt Tanks 231A and 231B from secondary containment requirements. Although this language exists, the exemption is temporary in nature, expiring in the year 2001. Since the secondary containment for these tanks does not meet current inspection requirements, these tanks are shown in this plan as having questionable and non-compliant secondary containment.

DESCRIPTION OF DEFICIENCY - Secondary Containment

DESCRIPTION OF CORRECTIVE/COMPENSATORY ACTION - N/A

INSPECTIONS

- This tank system is defined as a Category 4 tank system and therefore will be inspected daily.
-

DESCRIPTION OF THE BUILDING 374 TANK SYSTEM

Building 374 houses the Process Waste Treatment Facility which treats process wastewater from several buildings. The treatment process includes acid neutralization, a three-stage precipitation, flocculation, and clarification process, sludge treatment and immobilization, a multiple-effect evaporator system, a spray dryer, and salt immobilization system. Both radioactive and non-radioactive aqueous wastes are received and treated. All incoming process wastes containing greater than 13,500 pCi/l are sent to the precipitation process. Process wastes containing less than 13,500 pCi are sent to the evaporation process. Acid wastes are first neutralized with sodium hydroxide, filtered, then sent to the precipitation process.

The evaporation process consists of a four-stage evaporation system which results in the production of a concentrated salt solution. The evaporator condensate is discharged to the cooling towers and the facility steam plant and is excluded from the definition of a solid waste. The salt concentrate goes to the spray dryer where a dried salt is produced. The dried salt is collected in tank T-884, and transferred to mixing tanks T-883 A and B where cement is added. The resultant mixture, known as saltcrete, is drained into crates.

Secondary containment for all the tanks and ancillary equipment located in Building 374 is provided by a concrete floor that has been sealed with epoxy paint which is maintained free of cracks and gaps that could impair the effectiveness of the containment and allow the migration of contaminants to the environment. The secondary containment system also consists of floor sumps designed to collect spills.

The tanks in this building were installed during construction of Building 374 in 1975-76 and are made of carbon steel, stainless steel or fiberglass-reinforced plastic.

DESCRIPTION OF DEFICIENCY - None

DESCRIPTION OF CORRECTIVE/COMPENSATORY ACTION - N/A

INSPECTIONS

- This tank system is defined as a Category 4 tank system and therefore will be inspected daily.

DESCRIPTION OF THE BUILDING 428 TANK SYSTEM

Building 428 is a below grade enclosure constructed of concrete measuring 25 ft. x 16.3 ft. x 17 ft. which houses Tank 853. Tank 853 is constructed of fiberglass-reinforced plastic and was installed in 1975. The volume of Tank 853 is approximately 1,960 gallons and the secondary containment is adequate to contain that volume. The secondary containment consists of epoxy coated concrete floor and walls which is maintained free of cracks and gaps that could impair the effectiveness of the containment and allow the migration of contaminants to the environment. The tank is also equipped with automatic level sensing devices which alarm in the Building 374 control room. Processes in Building 123 are the only processes which discharge to Tank 853. The wastewater generated from Building 123 activities consists of laboratory rinse waters and acidic/basic waste and is collected in four under-sink sump tanks. All of these sumps, each equipped with automatic pumps, feed to a common pipe, then flow by gravity feed into Tank 853.

DESCRIPTION OF THE DEFICIENCY - None

DESCRIPTION OF CORRECTIVE/COMPENSATORY ACTION - N/A

INSPECTIONS

- This tank system is defined as a Category 4 tank system and therefore will be inspected daily.

DESCRIPTION OF THE BUILDING 444/447 TANK SYSTEM

Buildings 444/447 contain two waste collection systems: one for aqueous wastewater and the other for plating waste. The Building 444/447 process waste system includes several ancillary sumps which collect wastewater from various processes and groundwater to prevent building flooding. This process waste system utilizes a series of tanks and two rotary cloth filtration systems (RCFS). The system located in Building 447 consists of a RCFS and a 200-gallon polyethylene tank (identified as T-6) and was installed in 1979. The system located in Building 444 consists of a 500-gallon polyethylene receiving tank (identified as T-4), a RCFS, a 100-gallon fiberglass sump tank, and two 4,000-gallon welded steel tanks (identified as T-2 and T-3). The receiving tank, the RCFS and the sump tank were installed in 1979. The 4,000 gallon tanks were installed in 1953. All tanks are equipped with level sensing switches to serve as overfill prevention. The secondary containment for each of these tanks is provided by concrete floors and berms sealed with epoxy paint which are free of cracks and gaps that could impair the effectiveness of the containment and allow the migration of contaminants to the environment. designed to contain 100% of the operational capacity. This tank system is defined as a Vital Safety System since this system is integral to prevent building flooding. In addition, T-2 and T-3 are identified in the RFETS cleanup agreement, referenced under T-5 (OU9).

The plating laboratory waste collection system consists of four welded steel tanks. Tanks T-1 and T-2 have a capacity of 400 gallons and were installed in 1953. Tanks T-3 and T-4 have a capacity of 500 gallons and were installed in 1953 and 1985 respectively. The four tanks are provided with a concrete berm supplemented with a hypolon liner for secondary containment. This tank system has been physically emptied and isolated since May 1990.

DESCRIPTION OF DEFICIENCY

- Portions of the ancillary equipment do not have adequate secondary containment or are not inspectable.
- The acid/cyanide tanks have been identified as unfit for use due to tank integrity problems.

DESCRIPTION OF CORRECTIVE/COMPENSATORY ACTION

- The process waste system is destined for closure. No additional hazardous waste is placed in the system.
- The cyanide/acid tanks have been capped and completely isolated until closure can be performed.

INSPECTIONS

- The acid and cyanide tank system is defined as a Category 1 system and will be inspected quarterly.
- The process waste system is defined as a Category 2A tank system and will be inspected daily.

DESCRIPTION OF THE BUILDING 460 TANK SYSTEM

The process waste system for Building 460 consists of four collection sump tanks, one receiving tank, a rotary cloth filtration system (RCFS) and holding sump tank, and two transfer tanks. All tanks in this system are constructed of fiberglass-reinforced plastic, fiberglass, or polypropylene and were installed in 1984. Sump collection tank 1 is a 300-gallon tank located in a below-grade concrete pit measuring 6 ft. x 6 ft. x 6.6 ft. which has a capacity of 1,777 gallons and supports the electrochemical machining process. Sump collection tank 2 is a 300-gallon tank located in a below-grade concrete pit measuring 7 ft. x 7 ft. x 7.8 ft which has a capacity of 2,858 gallons and supports the non-destructive testing process. Sump collection tank 3 is a 225-gallon tank located in a below-grade concrete pit measuring 7 ft. x 7 ft. x 6 ft which has a capacity of 2,200 gallons. Sump collection tank 4 is a 300-gallon tank located in below-grade concrete pit measuring 6 ft. x 6 ft. x 7.4 ft. which has a capacity of 1,993 gallons. Sump tanks 3 and 4 support the cleaning process. The concrete pits are lined with a hypolon liner and serve as secondary containment. Each sump collection tank is equipped with automatic overflow prevention. Each of these sump collection tanks pump process waste to Tank T-4, a free-standing 1,000-gallon receiving tank. At a prescribed level, the process waste is pumped automatically in overhead piping to the RCFS. The liquid effluent is then collected in holding sump tank 5, a 300-gallon tank located in a below grade concrete pit also lined with a hypolon liner measuring 6 ft. x 6 ft. 6.5 ft. with the capacity of 1,750 gallons. At a prescribed level, the process waste is automatically pumped to either of the two 3,500-gallon transfer tanks, T-1 and T-2. Tanks T-1 and T-2 are interconnected by an overflow line and are equipped with high-level alarms as well as a sight level gauge. Secondary containment for these four tanks consists of a bermed enclosure 8.5 inches in height. The bermed area covers approximately 750 square feet and has a capacity to hold 6,036 gallons.

DESCRIPTION OF THE DEFICIENCY

- Ancillary equipment associated with collection sump tanks are primarily noncontinuous piping with screwed fittings. Portions of the ancillary equipment are not inspectable and secondary containment is not adequate.
- Holding sump tank 5 overfilled because of problems with the automatic overflow alarm in 1994.

DESCRIPTION OF CORRECTIVE/COMPENSATORY ACTION

- This tank system is being closed under an approved closure plan.

INSPECTIONS

- Sump tanks 1, 2, 3, and 4 are defined as Category 1 and will be inspected quarterly. The remaining process waste system is defined as a Category 2A tank system and will be inspected daily.

DESCRIPTION OF THE BUILDING 771 TANK SYSTEM

Building 771 is a plutonium recovery facility. Process drains and ancillary sumps in the building collect and transport process waste to the 90-Day accumulation tanks 309-E and 309-W located in the Building 771 annex. These tanks are constructed of fiberglass and have capacities of 3,800 gallons. Secondary containment is provided by a concrete floor and berm coated with epoxy paint which is free of cracks and gaps that could impair the effectiveness of the containment and allow the migration of contaminants to the environment. This tank system is defined as a Vital Safety System.

DESCRIPTION OF DEFICIENCY

- The ancillary sumps and portions of the ancillary equipment do not have inspectable secondary containment. In addition, some portions of the ancillary equipment are not inspectable.

DESCRIPTION OF CORRECTIVE/COMPENSATORY ACTION

- This tank system is destined for closure. No additional hazardous waste is placed in the system.

INSPECTIONS

- The process waste system is defined as a Category 2A tank system and will be inspected daily.

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DESCRIPTION OF THE BUILDING 774 TANK SYSTEM

Building 774 is a liquid waste treatment facility housing two treatment processes. One process treats organic waste from Buildings 707 and 777. The other process treats aqueous waste from Buildings 371 and 771. The treatment unit in Building 774 consist of 26 tanks constructed of stainless steel, carbon steel or concrete and ranging from 48 gallon capacity to 30,000-gallon capacity. These tanks were installed between 1953 and 1988.

The organic treatment process consists of five tanks used to treat organic waste from Buildings 707 and 777. The transfer line between the transfer tanks and the receiving tanks in Building 774 is double-contained. All tanks in Building 774 are provided with secondary containment consisting of concrete floors and berms coated with epoxy paint and free of cracks and gaps that could impair the effectiveness of the containment and allow the migration of contaminants to the environment. The five tanks used in this process are constructed of carbon steel, stainless steel or kynar-lined stainless steel; the tanks range in capacity from 170 gallons to 540 gallons and were installed between 1966 and 1987. T-13 and T-14 are needed for future operations while T-1, T-2 and T-374A will be closed.

DESCRIPTION OF DEFICIENCY - None

DESCRIPTION OF CORRECTIVE/COMPENSATORY ACTION - N/A

INSPECTIONS

- Tanks T-1, T-2 and T-374A are defined as Category 5B. The remaining tanks are defined as category 4.

DESCRIPTION OF THE BUILDING 776 TANK SYSTEM

Building 776 contains two tank systems: one used to support the Fluid Bed Incinerator (FBI) treatment units (the production unit and the pilot unit) and the other is used to support low-level process waste.

The Fluid Bed Incinerator storage tanks FBI-1 and FBI-2 support the FBI production unit. These tanks are constructed of stainless steel and were installed in 1977. Tank FBI-1 has a 400-gallon capacity while FBI-2 has a 350-gallon capacity and both are operated with raschig rings inside the tanks. Secondary containment is provided by the floors and berms coated with epoxy. The FBI pilot unit also utilizes two six-inch-diameter stainless steel pencil tanks T-1 and T-2 with capacities of approximately 7 gallons. Secondary containment is provided by the floors and berms coated with epoxy.

The four wastewater tanks T-1A, T-1B, T-2A and T-2B, collect process waste from Buildings 776, 777 and 779. Tanks T-1A and T-1B are 1,300-gallon tanks and are constructed of fiberglass-reinforced plastic. Tanks T-2A and T-2B have capacities of 1,630 gallons. All four of these tanks are interconnected to provide overflow prevention. These four tanks are located within a bermed area, supplemented with a hypolon bladder measuring 26 ft. x 18 ft. x 8 in. capable of containing 1,750 gallons of liquid. This tank system is defined as a Vital Safety System.

DESCRIPTION OF DEFICIENCY

- Although drained and isolated, tanks FBI-1 and FBI-2 tanks occasionally leak due to holdup of liquid.
- Waste has remained in the pencil tanks for greater than one year and is in potential noncompliance with the storage prohibition under LDR. In addition, current characterization of the pencil tank contents needs to be confirmed.

DESCRIPTION OF CORRECTIVE/COMPENSATORY ACTION

- The FBI tanks (1 and 2) and the pencil tanks are destined for closure.
- The contents of the pencil tanks will be drained and isolated in preparation of closure.

INSPECTIONS

- The process waste system is defined as a Category 4 tank system and will be inspected daily.
- The FBI units are defined as Category 2B tank system and will be inspected daily.

DESCRIPTION OF THE BUILDING 865 TANK SYSTEM

Building 865 has two sump tanks that were installed in 1987. Sump tank P-9 has been reclassified as an ancillary sump and is located in Room 145. This sump was typically used to transport some organic and heavy metals wastewater to Building 374. The sump tank is located in a below-grade pit measuring 1.5 ft. x 1.5 ft. x 1.3 ft. The second sump tank (ST-151) has never been used for hazardous waste and has therefore been withdrawn from RCRA regulation. ST-151 is located in Room 151 within a below-grade pit measuring 2.5 ft x 2.8 ft. x 3.1 ft. The sump tanks discharged process waste to three free-standing tanks located in Building 866. The RCRA-regulated portions of the system typically transported beryllium chloride and dilute nitric acid.

DESCRIPTION OF DEFICIENCY

- The ancillary equipment for the process waste system consists of threaded PVC pipes. The floor in Building 865 does not provide adequate secondary containment for the ancillary equipment.

DESCRIPTION OF CORRECTIVE/COMPENSATORY ACTION

- The Building 865 process waste system is currently shut down and is destined for closure.

INSPECTIONS

- The ancillary equipment which transfers liquids to Tanks T-1, T-2 and T-3 (discussed below) is defined as category 2A and will be inspected daily when in use. The out-of-service portion of the ancillary equipment in Building 865 is defined as a Category 1 system and will be inspected quarterly.

DESCRIPTION OF THE BUILDING 866 TANK SYSTEM

Building 866 is an above-grade waste transfer station which handles process waste from Buildings 865 and 889. There are five free-standing tanks located within this building which were installed in 1981. Tanks T-1, T-2, T-3 are 1,200-gallon fiberglass tanks dedicated to Building 865 process waste. Tanks T-4 and T-5 are 400-gallon stainless steel tanks also dedicated to Building 889 process waste. The tanks have interconnected piping to serve as overflow prevention. In addition, the tanks are equipped with high-level alarms which sound in the control rooms in Buildings 865 and 889. Ancillary equipment from the process buildings to the tanks in Building 866 are double walled. Process waste is pumped through Valve Vault 6 en route to Building 374. The secondary containment consists of a 410 ft² concrete floor surrounded by a 14 inch berm capable of containing 3,560 gallons. The concrete floor and berm are sealed with epoxy paint which are free of cracks and gaps that could impair the effectiveness of the containment and allow the migration of contaminants to the environment.

DESCRIPTION OF DEFICIENCY

- The procedures to ensure that the automatic overflow prevention system is operational are inadequate.

DESCRIPTION OF CORRECTIVE/COMPENSATORY ACTION

- This tank system is destined for closure. No additional hazardous waste is placed in the system.

INSPECTIONS

- This tank system is defined as a Category 2A tank system and will be inspected daily.

DESCRIPTION OF THE BUILDING 883 TANK SYSTEM

Building 883 contains two separate process waste systems: one for process waste generated during the acid etch process and the other for process waste generated during foundry operations. The first system consists of two tanks, T-1 and T-2. These tanks are constructed of stainless steel and have a capacity of 1,200 gallons and were installed in 1986. The tanks are located in a below-grade pit in Room 139 measuring 12.9 ft. x 15 ft. x 12 ft. and is capable of containing 17,360 gallons. The second system consists of seven free-standing carbon steel tanks located in Room 1 that were installed in 1956. Tanks A-24, A-25, and A-26 each have 750-gallon capacity and are interconnected with common piping which serves as overfill prevention. Tanks B-16, B-17, B-18, B-19 have 500, 350, 750, and 750-gallon capacities respectively. Overfill prevention for the B-series tanks is provided by common piping. A bermed area has been constructed to serve as secondary containment. The B-Series and A-Series tanks are included in the RFETS cleanup agreement, referenced under T-25 and T-26 respectively (OU9).

DESCRIPTION OF DEFICIENCY

- Tank A-26 contains liquid which have been stored approximately two years and is in potential noncompliance with the storage prohibition under LDR.
- The A and B series tanks are not equipped with adequate overfill prevention.
- The secondary containment for both tank systems is not adequate and certain sections of the ancillary equipment are not inspectable.
- The ancillary equipment for T-1 and T-2 has leaked in the past and evidence of leakage remains around the ancillary equipment.

DESCRIPTION OF CORRECTIVE/COMPENSATORY ACTION

- Tank A-26 will be drained and isolated.
- The Building 883 process waste system is currently shut down and is destined for closure.

INSPECTIONS

- Both tank systems are identified as Category 2B and will be inspected daily.

DESCRIPTION OF THE BUILDING 887 TANK SYSTEM

Building 887 houses seven free-standing tanks which support the Building 881 complex. Process and laboratory wastes are collected in floor and sink drains in Building 881 and subsequently flow through double-contained piping to the seven 3,000-gallon stainless steel tanks which were installed in 1971. Building 887 is a below-grade concrete enclosure. The concrete floor and walls are sealed with epoxy paint, free of cracks and gaps that could impair the effectiveness of the containment and allow the migration of contaminants to the environment. This pit measures 51.6 ft. x 23.1 ft. x 14.9 ft. and is capable of containing 131,000 gallons of liquid. These tanks have interconnected piping which serves as overfill prevention. The last tank in the train is equipped with overfill prevention in the form of a level-sensing device. These seven tanks are included in the RFETS cleanup agreement as T-24 (OU9). The secondary containment for these tanks is also in the RFETS cleanup agreement as T-32 (OU9).

DESCRIPTION OF DEFICIENCY

- The original process waste lines remain in place and must be closed.
- The ancillary equipment (i.e., the pumps) associated with the tanks in Building 887 leak when in operation.

DESCRIPTION OF CORRECTIVE/COMPENSATORY ACTION

- The ancillary equipment remaining in place has been completely drained and isolated.
- Tank T183 will be drained and isolated.
- The pumps in Building 887 will be replaced.

INSPECTIONS

- The Building 887 tank system has been defined as a Category 3 tank system and will be inspected daily.
- The ancillary equipment which has not been closed will be inspected quarterly until closed.

DESCRIPTION OF THE 903A DECONTAMINATION FACILITY TANK SYSTEM

The 903A decontamination facility supports environmental restoration activities performing RCRA Facility Investigations/Remedial Investigation (RFI/RI) and Remedial Action fieldwork for operable units at RFETS. The Decontamination Facility consists of three functional areas: 1) the equipment decontamination pad; 2) the environmental liquids management area; and; 3) the drum transfer area. This unit consists of a concrete pad which has a sump for collection of environmental liquids and sediments, two separators, three sedimentation tanks and a pumping system for transferring liquids. The liquids are transferred to five polyethylene holding tanks with 2,500-gallon capacity. Secondary containment for these tanks consists of one 30-millimeter very low-density polyethylene liners covering a berm capable of holding 12,500 gallons of liquid. The tanks are placed on high density polyethylene (HDPE) pallets. At a prescribed level and following analysis, the tanks are pumped to a tanker truck and subsequently transferred to Building 374, Building 891/OU1, or OU2 Field Treatability Unit.

DESCRIPTION OF DEFICIENCY - None

DESCRIPTION OF CORRECTIVE/COMPENSATORY ACTION - N/A

INSPECTIONS

- These tanks are identified as Category 4 system and will be inspected daily.

DESCRIPTION OF THE BUILDING 910 AND SURGE TANK SYSTEMS

Building 910 is a concrete structure with concrete floors and roof and designed to house a multi-effect evaporation process similar to that in Building 374 to treat solar pond water. Secondary containment is provided with a concrete floor and berms sealed with epoxy paint which are free of cracks and gaps that could impair the effectiveness of the containment and allow the migration of contaminants to the environment. The treatment process consists of 17 tanks. Twelve of these tanks make up the three identical evaporator systems. Five storage tanks are located in the basement of Building 910. The three modular storage tanks are located northeast of Building 771 and outside the Protected Area. The tanks are constructed of steel-walled panels with open tops and are equipped with automatic leak detection. The secondary containment system consists of a double, high-density polyethylene membrane.

DESCRIPTION OF DEFICIENCY - None

DESCRIPTION OF CORRECTIVE/COMPENSATORY ACTION - N/A

INSPECTIONS

- The tank system located in Building 910 is defined as a Category 5A system and will be inspected quarterly.
- The modular storage tanks are defined as Category 4 tank systems and will be inspected daily.

DESCRIPTION OF THE PROCESS WASTE TRANSFER SYSTEM

The process waste transfer system is composed of four separate transfer lines which connect the tanks in various buildings throughout the Site to Building 374: the high level radioactive waste line, low-level waste line, the laundry waste line, and the reverse flow line. Each transfer piping system is made of an outer casing pipe and inner transfer line. The space between the two pipes serves as secondary containment. The process waste line also consists of 20 valve vaults which are below-grade concrete pits equipped with 1/4-inch polyethylene liners and groundwater collection sumps between the liner and the concrete floor to provide secondary containment. Collection bottles are located at the low end of each section of casing pipe within the valve vaults which will collect liquid if a leak occurs. Each valve vault is equipped with automatic leak detection system which alarm in the Building 374 control room. Valve vault seven is included in the RFETS cleanup agreement as IHSS 123.1.

DESCRIPTION OF DEFICIENCY - None

DESCRIPTION OF CORRECTIVE/COMPENSATORY ACTION - N/A

INSPECTIONS

- The process waste system is defined as a Category 4 system and will be inspected monthly (per CDPHE letter dated 6/28/93).

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APPENDIX 2

COMPLIANCE MATRIX

HAZARDOUS WASTE TANK COMPLIANCE MATRIX

Bldg	Tank	RCRA #	Category 1/2/3/4/5	Operating Record	Secondary Containment	Overfill Prevention	Spill Prevention	Spill Response/Equipment	Treating of personnel	Inspectable	Approved Codes	Storage Prohibition EDA	Signs	Compatible waste	Tank/Manhole eq Integrity	Waste analysis	Closure	
Regulatory requirement				\$265.1 5 \$265. 73	\$265.193	\$265.194	\$265.194	\$265.194	\$265.196 \$265.32	\$265.16	\$265.195	\$100.21	\$268.50	\$265.17	\$265.194	\$265.19 6	\$265.1 3	\$265.197
374	T-231A	43.01	4		X													
374	T-231B	43.02	4		X													
374	D-801A	42.01	4															
374	D-801B	42.02	4															
374	D-801C	42.03	4															
374	D-802A	42.04	4															
374	D-802B	42.05	4															
374	D-802C	42.06	4															

Noncompliance is designated with an 'X'. No X indicates compliance.

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HAZARDOUS WASTE TANK COMPLIANCE MATRIX

Bldg	Tank	RCRA #	Category 1/2/3/4/5	Operating Record	Secondary Containment	Overfill Prevention	Spill Prevention	Spill Response/Equipment	Training of personnel	Inspectable	Approved Codes	Storage Prohibition LDR	Signs	Compatible waste	Tank/Drum Integrity	Waste analysis	Closure
Regulatory requirement				\$265.1 5 \$265. 73	\$265.193	\$265.194	\$265.194	\$265.196 \$265.32	\$265.16	\$265.195	\$100.21	\$268.50	\$265.17	\$265.194	\$265.19 6	\$265.1 3	\$265.197
374	D-826A	42.07	4														
374	D-826B	42.08	4														
374	D-826C	42.09	4														
374	D-827	42.10	4														
374	D-830	42.11	4														
374	D-832	42.12	4														
374	D-834	42.13	4														
374	D-876	42.16	4														

Noncompliance is designated with an 'X'. No X indicates compliance.

4/2/96

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HAZARDOUS WASTE TANK COMPLIANCE MATRIX

Pdg.	Tank	RCRA #	Category 1/2/3/4/5	Operating Record	Secondary Containment	Overfill Prevention	Spill Prevention	Spill Response/Equipment	Training of personnel	Inspectable	Approved Codes	Storage Prohibition LDR	Signs	Compatible waste	Tank/manifesting eq integrity	Waste analysis	Closure
		Regulatory requirement		\$265.1 5 \$265. 73	\$265.193	\$265.194	\$265.194	\$265.196 \$265.32	\$265.16	\$265.195	\$100.21	\$268.50	\$265.17	\$265.194	\$265.19	\$265.1 3	\$265.197
374	D-878	42.17	4												6		
374	D-879	42.18	4														
374	T-802	42.19	4														
374	T-803	42.20	4														
374	T-804	42.21	4														
374	T-805	42.22	4														
374	W-803	42.25	4														
374	FL-803	42.26	4														

Noncompliance is designated with an 'X'. No X indicates compliance.

HAZARDOUS WASTE TANK COMPLIANCE MATRIX

Bldg	Tank	RCRA #	Category 1/2/3/4/5	Operating Record	Secondary Containment	Overfill Prevention	Spill Prevention	Spill Response/Equipment	Training of personnel	Inspection	Approved Codes	Storage Prohibition LDR	Signs	Compatible waste	Tank/auxiliary eq integrity	Waste analysis	Closure
Regulatory requirement				\$265.1 5 \$265. 73	\$265.193	\$265.194	\$265.194	\$265.196 \$265.32	\$265.16	\$265.195	\$100.21	\$268.50	\$265.17	\$265.194	\$265.19 6	\$265.1 3	\$265.197
374	T-883A	42.27	4														
374	T-883B	42.28	4														
374	T-884	42.29	4														
374	D-804A	42.50	4														
374	D-804B	42.51	4														
374	D-804C	42.52	4														
374	D-804D	42.53	4														
374	D-811A	42.54	4														

2/ Noncompliance is designated with an 'X'. No X indicates compliance.

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HAZARDOUS WASTE TANK COMPLIANCE MATRIX

Bldg	Tank	RCRA #	Category 1/2/3/4/5	Operating Record	Secondary Containment	Overfill Prevention	Spill Prevention	Spill Response/Equipment	Training of personnel	Inspectable	Approved Codes	Storage Prohibition LDA	Signs	Compatible waste	Tank/ancillary eq integrity	Waste analysis	Closure	
Regulatory requirement				\$265.1 5 \$265. 73	\$265.193	\$265.194	\$265.194	\$265.194	\$265.196 \$265.32	\$265.16	\$265.195	\$100.21	\$268.50	\$265.17	\$265.194	\$265.19	\$265.1 3	\$265.197
374	D-811B	42.55	4															
374	D-812	42.56	4															
374	D-813	42.57	4															
374	D-814	42.58	4															
374	D-815	42.59	4															
374	D-816	42.60	4															
374	D-817	42.61	4															
374	D-818	42.62	4															

Noncompliance is designated with an 'X'. No X indicates compliance.

HAZARDOUS WASTE TANK COMPLIANCE MATRIX

Bldg.	Tank	RCRA #	Category 1/2/3/4/5	Operating Record	Secondary Containment	Overfill Prevention	Spill Prevention	Spill Response/Equipment	Treating of personnel	Inspection	Approved Codes	Storage Prohibition EDR	Signs	Compatible waste	Manifestation and integrity	Waste analysis	Closure
Regulatory requirement				\$265.1 5 \$265.73	\$265.193	\$265.194	\$265.194	\$265.196 \$265.32	\$265.16	\$265.195	\$100.21	\$268.50	\$265.17	\$265.194	\$265.19 6	\$265.1 3	\$265.197
374	D-819	42.63	4														
374	D-820	42.64	4														
374	D-821	42.65	4														
374	D-822	42.66	4														
374	D-823	42.67	4														
374	FL-831	42.68	4														
374	D-852	42.69	4														
374	D-875	42.70	4														

23 Noncompliance is designated with an 'X'. No X indicates compliance.

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HAZARDOUS WASTE TANK COMPLIANCE MATRIX

Bldg	Tank	RCRA #	Category 1/2/3/4/5	Operating Record	Secondary Containment	Overfill Prevention	Spill Prevention	Spill Response/Equipment	Training of personnel	Inspectable	Approved Codes	Storage Prohibition LDR	Signs	Compatible waste	Tank/enclosure eq integrity	Waste analysis	Closure	
Regulatory requirement				\$265.1 5 \$265. 73	\$265.193	\$265.194	\$265.194	\$265.194	\$265.196 \$265.32	\$265.16	\$265.195	\$100.21	\$268.50	\$265.17	\$265.194	\$265.19	\$265.1 3	\$265.197
374	D-807A	42.71	4															
374	D-807B	42.72	4															
374	D-806	42.73	4															
374	D-843	42.74	4															
374	D-808	42.75	4															
374	D-824A	42.76	4															
374	D-824B	42.77	4															
374	FL-802A	42.78	4															

2/ Noncompliance is designated with an 'X'. No X indicates compliance.

HAZARDOUS WASTE TANK COMPLIANCE MATRIX

Bldg	Tank	RCRA #	Category 1/2/3/4/5	Operating Record	Secondary Containment	Overfill Prevention	Spill Prevention	Spill Response/Equipment	Training of personnel	Inspection	Approved Codes	Storage Prohibition LDR	Signs	Composite waste	Tank/auxiliary eq integrity	Waste analysis	Closure
Regulatory requirement				\$265.1 5 \$265. 73	\$265.193	\$265.194	\$265.194	\$265.196 \$265.32	\$265.16	\$265.195	\$100.21	\$268.50	\$265.17	\$265.194	\$265.19	\$265.1 3	\$265.197
374	FL-802B	42.79	4														
374	W-801	42.80	4														
374	D-825A	42.81	4														
374	D-825B	42.82	4														
374	D-848	42.83	4														
374	D-844A	42.84	4														
374	D-844B	42.85	4														
374	None	42.86	4														

25 Noncompliance is designated with an 'X'. No X indicates compliance.

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HAZARDOUS WASTE TANK COMPLIANCE MATRIX

Bldg	Tank	RCRA#	Category 1/2/3/4/5	Operating Record	Secondary Containment	Overfill Prevention	Spill Prevention	Spill Response/Equipment	Training of personnel	Inspectable	Approved Codes	Storage Prohibition LDR	Signs	Compatible waste	Tank/ancillary eq integrity	Waste analysis	Closure
		Regulatory requirement		\$265.1 5 \$265. 73	\$265.193	\$265.194	\$265.194	\$265.196 \$265.32	\$265.16	\$265.195	\$100.21	\$268.50	\$265.17	\$265.194	\$265.19	\$265.1 3	\$265.197
374	T-807	42.87	4														
428	D-853	40.01	4														
444	RT T-4	40.35	2A		X					X							
444	Sump tk	40.36	2A		X					X							
444	Fab Fill	39.01	5A														
444	Acid T-1	40.02	1												X		
444	Acid T-2	40.03	1												X		
444	CN T-3	40.06	1												X		

Noncompliance is designated with an 'X'. No X indicates compliance.

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HAZARDOUS WASTE TANK COMPLIANCE MATRIX

Bldg.	Tank	RCRA #	Category 1/2/3/4/5	Operating Record	Secondary Containment	Overfill Prevention	Spill Prevention	Spill Response/Equipment	Training of personnel	Inspectable	Approved Codes	Storage Prohibition LDR	Signs	Compatible waste	Tank/auxiliary eq integrity	Waste analysis	Closure
		Regulatory requirement		\$265.1 5 \$265. 73	\$265.193	\$265.194	\$265.194	\$265.196 \$265.32	\$265.16	\$265.195	\$100.21	\$268.50	\$265.17	\$265.194	\$265.19	\$265.1 3	\$265.197
444	CN T-4	40.07	1												X		
444	PW T-2	40.04	2A		X					X							
444	PW T-3	40.05	2A		X					X							
447	Fab Fil	39.02	5A														
447	Sump tk	40.37	2A							X							
460	PW T-1	40.08	2A														
460	PW T-2	40.09	2A														
460	CT T-4	40.10	2A														

27 Noncompliance is designated with an 'X'. No X indicates compliance.

HAZARDOUS WASTE TANK COMPLIANCE MATRIX

Bldg.	Tank	RCRA #	Category 1/2/3/4/5	Operating Record	Secondary Containment	Overfill Prevention	Spill Prevention	Spill Response/Equipment	Training of personnel	Inspectable	Approved Codes	Storage Prohibition LDH	Signs	Compatible waste	Tank/auxiliary eq integrity	Waste analysis	Closure	
Regulatory requirement				\$265.1 5 \$265. 73	\$265.193	\$265.194	\$265.194	\$265.194	\$265.196 \$265.32	\$265.16	\$265.195	\$100.21	\$268.50	\$265.17	\$265.194	\$265.19	\$265.1 3	\$265.197
460	Sump tk1	40.11	1							X								
460	Sump tk2	40.12	1							X								
460	Sump tk3	40.13	1							X								
460	Sump tk4	40.14	1							X								
460	Sump tk5	40.15	2A			X												
460	Fab Fil	39.03	5A															
771	309E	1312 90- DAY	2A							X								
771	309W	1313 90- DAY	2A							X								

28 Noncompliance is designated with an 'X'. No X indicates compliance.

HAZARDOUS WASTE TANK COMPLIANCE MATRIX

Bldg	Tank	RCRA#	Category 1/2/3/4/5	Operating Record	Secondary Containment	Overfill Prevention	Spill Prevention	Spill Response/Equipment	Training of personnel	Inspectable	Approved Codes	Storage Prohibition LDR	Signs	Compatible waste	Tank/auxiliary eq integrity	Waste analysis	Closure	
Regulatory requirement				\$265.1 5 \$265. 73	\$265.193	\$265.194	\$265.194	\$265.194	\$265.196 \$265.32	\$265.16	\$265.195	\$100.21	\$268.50	\$265.17	\$265.194	\$265.19 6	\$265.1 3	\$265.197
774	T-102	41.01	4															
774	T-103	41.02	4															
774	T-1A	55.01	4															
774	T-1RF	55.02	4															
774	T-4L	55.03	4															
774	T-10	55.04	4															
774	T-4R	55.05	4															
774	T-70	55.07	4															

Noncompliance is designated with an 'X'. No X indicates compliance.

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HAZARDOUS WASTE TANK COMPLIANCE MATRIX

Bldg	Tank	RCRA #	Category 1/2/3/4/5	Operating Record	Secondary Containment	Overfill Prevention	Spill Prevention	Spill Response/Equipment	Training of personnel	Inspectable	Approved Codes	Storage Prohibition LBR	Signs	Compatible waste	Tank/secondary eq integrity	Waste analysis	Closure
		Regulatory requirement		\$265.1 5 \$265. 73	\$265.193	\$265.194	\$265.194	\$265.196 \$265.32	\$265.16	\$265.195	\$100.21	\$268.50	\$265.17	\$265.194	\$265.19	\$265.1 3	\$265.197
774	T-5	55.08	4														
774	T-C1	55.09	4														
774	T-9	55.10	4														
774	T-2F	55.11	4														
774	T-12	55.12	4														
774	T-201	55.17	4														
774	T-202	55.18	4														
774	T-203	55.19	4														

Noncompliance is designated with an 'X'. No X indicates compliance.

HAZARDOUS WASTE TANK COMPLIANCE MATRIX

Bldg.	Tank	RCRA#	Category 1/2/3/4/5	Operating Record	Secondary Containment	Overfill Prevention	Spill Prevention	Spill Response/Equipment	Training of personnel	Inspectable	Approved Codes	Storage Prohibition LDR	Signs	Compatible Waste	Tank/Drum/Bag Integrity	Waste Analysis	Closure
Regulatory requirement				\$265.1 5 \$265. 73	\$265.193	\$265.194	\$265.194	\$265.196 \$265.32	\$265.16	\$265.195	\$100.21	\$268.50	\$265.17	\$265.194	\$265.19 6	\$265.1 3	\$265.197
774	T-204	55.20	4														
774	T-73	55.23	4														
774	T-210A	55.24	4														
774	T-71	55.25	4														
774	T-40	55.27	4														
774	T-1	56.01	5B														
774	T-2	56.02	5B														
774	T-13	56.03	4														

3/ Noncompliance is designated with an 'X'. No X indicates compliance.

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HAZARDOUS WASTE TANK COMPLIANCE MATRIX

Bldg.	Tank	RCRA#	Category 1/2/3/4/5	Operating Record	Secondary Containment	Overfill Prevention	Spill Prevention	Spill Response/Equipment	Treating of personnel	Inspectable	Approved Codes	Storage Prohibition LDR	Signs	Compatible waste	Tank/Vaulting eq integrity	Waste analysis	Closure
		Regulatory requirement		\$265.1 5 \$265. 73	\$265.193	\$265.194	\$265.194	\$265.194 \$265.32	\$265.16	\$265.195	\$100.21	\$268.50	\$265.17	\$265.194	\$265.19 6	\$265.1 3	\$265.197
774	T-14	56.04	4														
774	T-374A	56.07	5B														
776	T-2A	40.70	4														
776	T-2B	40.71	4														
776	T-1A	40.72	4														
776	T-1B	40.73	4														
776	FBI-2	44.01	2B												X		
776	FBI-1	44.02	2B												X		

32 Noncompliance is designated with an 'X'. No X indicates compliance.

4/2/96

HAZARDOUS WASTE TANK COMPLIANCE MATRIX

Regulatory requirement	RCRA#	Category 1/2/3/4/5	Operating Record	Secondary Containment	Overfill Prevention	Spill Prevention	Spill Response/Equipment	Treating of personnel	Inspectable	Approved Codes	Storage Prohibition (D9	Signs	Compatible waste	Tank/Drum Integrity and Integrity	Waste analysis	Closure
			\$265.1 5 \$265. 73	\$265.193	\$265.194	\$265.194	\$265.196 \$265.32	\$265.16	\$265.195	\$100.21	\$268.50	\$265.17	\$265.194	\$265.19	\$265.1 3	\$265.197
776	T-1	49.02 2B									X				X	
776	T-2	49.02 2B									X				X	
866	T-4	40.32 1			X											
866	T-5	40.33 1			X											
866	T-1	40.17 2A			X											
866	T-2	40.18 2A			X											
866	T-3	40.19 2A			X											
883	T-1	40.27 2B		X			X		X					X		

33 Noncompliance is designated with an 'X'. No X indicates compliance.

HAZARDOUS WASTE TANK COMPLIANCE MATRIX

Bldg	Tank	RCRA#	Category 1/2/3/4/5	Operating Record	Secondary Containment	Overfill Prevention	Spill Prevention	Spill Response/Equipment	Training of Personnel	Inspectable	Approved Codes	Storage Prohibition LDR	Closure	Compatible Waste	Tank/Accessory eq Integrity	Waste analysis	Closure
Regulatory requirement				\$265.1 5 \$265. 73	\$265.193	\$265.194	\$265.194	\$265.196 \$265.32	\$265.16	\$265.195	\$100.21	\$268.50	\$265.17	\$265.194	\$265.19 6	\$265.1 3	\$265.197
883	T-2	40.28	2B		X			X		X					X		
883	B-17	40.29	1		X	X				X							
883	B-16	40.38	1		X	X											
883	B-18	40.30	1		X	X											
883	B-19	40.31	1		X	X											
883	A-24	40.39	1		X	X											
883	A-25	40.40	1		X	X											
883	A-26	40.41	2B		X	X						X					

Noncompliance is designated with an 'X'. No X indicates compliance.

4/2/96

HAZARDOUS WASTE TANK COMPLIANCE MATRIX

Bldg	Tank	RCRA #	Category: 1/2/3/4/5	Operating Record	Secondary Containment	Overfill Prevention	Spill Prevention	Spill Response/Equipment	Training of personnel	Inspectable	Approved Codes	Storage Prohibition LHM	Signs	Compatible waste	Tank/Manhole Integrity	Waste analysis	Closure
Regulatory requirement				\$265.1 5 \$265. 73	\$265.193	\$265.194	\$265.194	\$265.196 \$265.32	\$265.16	\$265.195	\$100.21	\$268.50	\$265.17	\$265.194	\$265.19 6	\$265.1 3	\$265.197
887	T-183	40.20	3									X			X		
887	T-184	40.21	3												X		
887	T-185	40.22	3												X		
887	T-802A	40.23	3												X		
887	T-802B	40.24	3												X		
887	T-802C	40.25	3												X		
887	T-802D	40.26	3												X		
903	Decon Pad	18.01	4														

35 Noncompliance is designated with an 'X'. No X indicates compliance.

HAZARDOUS WASTE TANK COMPLIANCE MATRIX

Bldg.	Tank	RCRA #	Category 1/2/3/4/5	Operating Record	Secondary Containment	Overfill Prevention	Spill Prevention	Soil Response/Equipment	Training of personnel	Inspection	Approved Codes	Storage Prohibition EDR	Signs	Compatible Waste	Tank/Accessory eq Integrity	Waste analysis	Closure
Regulatory requirement				\$265.1 5 \$265. 73	\$265.193	\$265.194	\$265.194	\$265.194 \$265.32	\$265.16	\$265.195	\$100.21	\$268.50	\$265.17	\$265.194	\$265.19	\$265.1 3	\$265.197
910	Surge tanks	38.01	4														
910	Surge tanks	38.02	4														
910	Surge tanks	38.03	4														
910	D-9	38.04	5B														
910	D-18	38.05	5B														
910	D-50	38.06	5B														
910	D-57	38.07	5B														
910	D-56	38.14	5B														

36 Noncompliance is designated with an 'X'. No X indicates compliance.

HAZARDOUS WASTE TANK COMPLIANCE MATRIX

Blgd	Tank	RCRA #	Category 1/2/3/4/5	Operating Record	Secondary Containment	Overfill Prevention	Spill Prevention	Spill Response/Equipment	Training of personnel	Inspectable	Approved Codes	Storage Prohibition LBR	Signs	Compatible waste	Tank/roll-off eq integrity	Waste analysis	Closure
Regulatory requirement				\$265.1 5 \$265. 73	\$265.193	\$265.194	\$265.194	\$265.196 \$265.32	\$265.16	\$265.195	\$100.21	\$268.50	\$265.17	\$265.194	\$265.19	\$265.1 3	\$265.197
910	D-4001-1	38.08	5B														
910	D-4001-2	38.09	5B														
910	D-4001-3	38.10	5B														
910	D-4008-1	38.11	5B														
910	D-4008-2	38.12	5B														
910	D-4008-3	38.13	5B														
910	D-6005-1	38.15	5B														
910	D-6005-2	38.16	5B														

37 Noncompliance is designated with an 'X'. No X indicates compliance.

HAZARDOUS WASTE TANK COMPLIANCE MATRIX

Bldg.	Tank	RCRA#	Category 1/2/3/4/5	Operating Record \$265.1 5 \$265. 73	Secondary Containment \$265.193	Overfill Prevention \$265.194	Spill Prevention \$265.194	Spill Response/Equipment \$265.196 \$265.32	Treating of personnel \$265.16	Inspectable \$265.195	Approved Codes \$100.21	Storage Prohibition LDR \$268.50	Spill \$265.17	Comparable waste \$265.194	Tank/secondary eq integrity \$265.19 6	Waste analysis \$265.1 3	Closure \$265.197
Regulatory requirement																	
910	D-6005-3	38.17	5B														
910	D-6001-1	38.18	5B														
910	D-6001-2	38.19	5B														
910	D-6001-3	38.20	5B														
881	VV-1	40.50	4														
883	VV-2	40.51	4														
889	VV-3	40.52	4														
889	VV-4	40.53	4														

38 Noncompliance is designated with an 'X'. No X indicates compliance.

HAZARDOUS WASTE TANK COMPLIANCE MATRIX

Bldg	Tank	RCRA #	Category 1/2/3/4/5	Operating Record	Secondary Containment	Overfill Prevention	Spill Prevention	Spill Response/Equipment	Training of personnel	Inspectable	Approved Codes	Storage Prohibition LDR	Signs	Corrosible waste	Tank/manifest integrity	Waste analysis	Closure	
Regulatory requirement				\$265.1 5 \$265.73	\$265.193	\$265.194	\$265.194	\$265.194 \$265.32	\$265.196	\$265.16	\$265.195	\$100.21	\$268.50	\$265.17	\$265.194	\$265.19 6	\$265.1 3	\$265.197
889	VV-5	40.54	4															
865	VV-6	40.55	4															
707	VV-7	40.56	4															
707	VV-8	40.57	4															
707	VV-8	40.58	4															
559	VV-10	40.59	4															
559	VV-11	40.60	4															
231	VV-12	40.61	4															

Noncompliance is designated with an 'X'. No X indicates compliance.

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HAZARDOUS WASTE TANK COMPLIANCE MATRIX

Bldg.	Tank	RCRA#	Category 1/2/3/4/5	Operating Record	Secondary Containment	Overfill Prevention	Spill Prevention	Spill Response/Equipment	Training of personnel	Inspectable	Approved Codes	Storage Prohibition LDR	Signs	Compatible waste	Tank/secondary integrity	Waste analysis	Closure
		Regulatory requirement		\$265.1 5 \$265. 73	\$265.193	\$265.194	\$265.194	\$265.196 \$265.32	\$265.16	\$265.195	\$100.21	\$268.50	\$265.17	\$265.194	\$265.19 6	\$265.1 3	\$265.197
374	VV-13	40.62	4														
371	VV-14	40.63	4														
443	VV-15	40.64	4														
443	VV-16	40.65	4														
444	VV-17	40.66	4														
460	VV-18	40.67	4														
444	VV-19	40.68	4														
444	VV-20	40.69	4														

Noncompliance is designated with an 'X'. No X indicates compliance.

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APPENDIX 3
LISTS OF OTHER RCRA REGULATED
TANKS

Table 1: RCRA-Regulated Petroleum Underground Storage Tanks

Project	Tank Common Number	Location Building	Contents	Regulatory Driver
UST Replacement ¹	Tank 1	B120	Fuel	7 CCR 1101-14
	Tank 3	B127	Fuel	7 CCR 1101-14
	Tank 4	B381	Fuel	7 CCR 1101-14
	Tank 5	B331	Fuel	7 CCR 1101-14
	Tank 6	B331	Fuel	7 CCR 1101-14
	Tank 7	B331	Fuel	7 CCR 1101-14
	Tank 8	B331	Fuel	7 CCR 1101-14
	Tank 14	B559	Fuel	7 CCR 1101-14
	Tank 15	B562	Fuel	7 CCR 1101-14
	Tank 16	B709	Fuel	7 CCR 1101-14
	Tank 18	B727	Fuel	7 CCR 1101-14
	Tank 19	B729	Fuel	7 CCR 1101-14
	Tank 21	B771	Fuel	7 CCR 1101-14
	Tank 23	B776	Fuel	7 CCR 1101-14
	Tank 24	B779	Fuel	7 CCR 1101-14
	Tank 25	B827	Fuel	7 CCR 1101-14
	Tank 32	B920	Fuel	7 CCR 1101-14
	Tank 33	B989	Fuel	7 CCR 1101-14
	Tank 66	B881	Fuel	7 CCR 1101-14
Other UST ¹	Tank 20	B771	Empty (previously fuel)	7 CCR 1101-14
Completed UST Replacement ²	Tank 2	B124	Foam	Closed under 7 CCR 1101-14
	Tank 9	B443	Foam	Closed under 7 CCR 1101-14
	Tank 13	B443	Foam	Closed under 7 CCR 1101-14
	Tank 22	B776	Grout	Closed under 7 CCR 1101-14

1. These tanks are being managed and closed pursuant to 7 CCR 1101-14.
2. The tanks have been closed pursuant to 7 CCR 1101-14. No further action is required.

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Table 2: Inactive Hazardous Waste Tanks¹

Project	Tank Common Number	Location Building	Other Designation	Contents	Regulatory Driver
Remediation Accelerated Actions ² (OU9)	T-2	B441	IHSS 121	Aqueous	6 CCR 1007-3
	T-3	B441	IHSS 121	Aqueous	6 CCR 1007-3
	T-10 (2 tanks)	B776	IHSS 121	Aqueous	6 CCR 1007-3
	T-14	B774	IHSS 121 Unit 55.16, Tank #68	Aqueous	6 CCR 1007-3
	T-16 (2 tanks)	B774	IHSS 121 Unit 55.14, Tank #66 Unit 55.15, Tank #67	Aqueous	6 CCR 1007-3
	T-40	B889	IHSS 121	Aqueous	6 CCR 1007-3
Remediation (OU9)	T-7 (sump)	B559	IHSS 121	Empty ³	6 CCR 1007-3
	T-8 (2 tanks)	B771	IHSS 121	Empty ³	6 CCR 1007-3
	T-9 (2 tanks)	B776	IHSS 121	Empty ³	6 CCR 1007-3
	T-11/30 (2 tanks/sump)	B731	IHSS 121	Empty ³	6 CCR 1007-3
	T-13	B774	IHSS 121 Unit 55.13, Tank #40	Empty ³	6 CCR 1007-3
	T-23 (sump)	B865	IHSS 121	Empty ³	6 CCR 1007-3
	T-28 (sump)	B889	IHSS 121	Empty ³	6 CCR 1007-3
	T-29 (sump)	B774	IHSS 121 Tank 207	Empty ³	6 CCR 1007-3
	T-32 (sump)	B887	IHSS 121	Empty ³	6 CCR 1007-3
	T-38 (sump)	B779	IHSS 121	Empty ³	6 CCR 1007-3
Remediation ² (OU10)	4	B443	IHSS 129	Fuel & Solvent	6 CCR 1007-3
Remediation (OU 4)	Clarifier	B788	IHSS 101 Unit 48	Pond Sludge	6 CCR 1007-3

1. Table based on historical data. Information may change as new information becomes available. All tanks in this table are included in the RFETS cleanup agreement and will be remediated pursuant to that agreement.
2. Inventory removal from these tanks is being accelerated pursuant to the RFETS cleanup agreement.
3. Tanks are currently not storing hazardous waste. Based on historical data, these tanks previously stored aqueous hazardous waste.

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